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| APPLICATION NO.                                                      | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------------------------------------------------------|-------------|----------------------|---------------------|------------------|
| 09/994,520                                                           | 11/26/2001  | Scott Lochner        | 07326-002003        | 1263             |
| 20985                                                                | 7590        | 12/15/2005           | EXAMINER            |                  |
| FISH & RICHARDSON, PC<br>P.O. BOX 1022<br>MINNEAPOLIS, MN 55440-1022 |             |                      | DINH, DUC Q         |                  |
|                                                                      |             |                      | ART UNIT            | PAPER NUMBER     |

2674

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|                              |                        |                     |  |
|------------------------------|------------------------|---------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b> | <b>Applicant(s)</b> |  |
|                              | 09/994,520             | LOCHNER ET AL.      |  |
|                              | <b>Examiner</b>        | <b>Art Unit</b>     |  |
|                              | DUC Q. DINH            | 2674                |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 2-22 and 24-33 is/are pending in the application.
- 4a) Of the above claim(s) 24-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                            | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

### DETAILED ACTION

1. This is response to the Amendment filed on September 22, 2003.

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 10-11 and 13-21 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The original disclosure, when filed, does not disclose the “said video generation elements produces information indicative of an image to be display on said display part, but sends only new picture information representing changes in a displayed image when there is a change in contents of image”. The disclosure, specifically page 13 lines 15-18 only discloses “new picture information must be transmitted only when there is a change in some part of the displayed image”. However, the new limitation “sends only new picture information representing changes in a displayed image when there is a change in contents of image” is not discloses in the original disclosure. Similarity, there is no support for the newly added limitation “new image information representing changes in an image since previous transmission” in the specification.

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Furthermore, there is no support for the “at least a video generation element which produces a video output including at least one synchronization signal in claim 1; said video generation element produces information indicative of an image to be displayed on said display part in claim 10; the video generation element produces a digital signal with parallel bits, and convert said signal into serial signal in claim 9; a video processing part which processes video information to produce and output indicative of said video information in claim 14”. The specification in page 7 only discloses unit 4 contains a CPU with microprocessor, memory, input/output interface and a variety of disc drivers...it is not clear which one of those circuit is the claimed video generation above, there is no support for the underlined limitation above.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 9 and 14 recites the limitation "a second processing unit" in 6. There is insufficient antecedent basis for this limitation in the claim. Also, there is insufficient antecedent basis for the limitation “said digital first housing” in claim 9.

The examiner examines the application based on the best understood of the claim language.

### ***Drawings***

6. The drawings are objected to under 37 CFR 1.83(a) because they fail to show “unit 70” in page 2, lines 10 as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to

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the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

7. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the “at least one video generation element produces a video output including at least one synchronization signal” in claim 1; video generation element produces information indicative of an image to be displayed on said display part in claim 10; the video generation element produces a digital signal with parallel bits, and convert said signal into serial signal in claim 9; a video processing part which processes video information to produce and output indicative of said video information in claim 14” must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing

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sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either “Replacement Sheet” or “New Sheet” pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 2, 3, 5, 8 and 12 is rejected under 35 U.S.C. 102(b) as being anticipated by Lemelson et al (U.S Patent No 4,485,400), hereinafter Lemelson.

In reference to claim 2, Lemelson discloses a system in Fig. 6-7, comprising:

a first housing (first portable video phone in Fig. 6) having a data entry part (keyboard 76) allowing entry of data, a display part (display 42) allowing display of information, and a first wireless transceiver part (105, 106 and 107), which communicates information; and

a second housing separate from said first housing (second portable video phone 86) having second wireless transceiver part (15-17, Fig. 6) adapted to communicating part to exchange information therewith (each unit of the video phone containing in a single housing; see abstract), said second housing include at least a video generation circuit (camera 22, A/D circuit 26, memory 24; sync generator 108 and decoder 109) which produces a video output including at least one synchronization signal (col. 10, lines 55-63) and sending said video output to said first housing to drive the display part to display information based on video output with said at least one synchronization signal (col.11, lines 50-63).

In reference to claim 3, Lemelson discloses the synchronization signal includes at least one horizontal synchronization signal and one vertical synchronization signal (col. 10, lines 55-62).

In reference to claim 5, Lemelson discloses video output signal include analog video signal (the D/A converter 39 provide output analog video signal in Fig. 7B).

In reference to claim 7, Lemelson discloses at least one synchronization signal is contained within a same signal as said video output signal (col. 4, lines 19-24).

In reference to claim 8, Lemelson discloses the video output signal includes an RGB signal (col. 3, lines 10-18).

In reference to claim 12, Lemelson disclose that video phone system comprising a third housing (third video phone which communicate with the first video phone), also including a data entry part allowing entry data, a display part allowing display information and another transceiver part communicating information, wherein the third housing also communicates

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information to the second housing (second video phone) and receives data from the second housing (the second video phone system; see abstract).

***Claim Rejections - 35 USC § 103***

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. Claims 4, 6, 11, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson (U.S Patent No. 4,485, 400) in view of Tymes (U.S Patent No. 5,157,687).

In reference to claims 4, Lemelson does not disclose the horizontal and vertical synchronization signals are respectively produced on different frequency channels.

Tymes discloses a packet data communication network between terminals using different frequency channels to carry the data signals in Fig. 2 (col. 13, lines 59-65 and col. 14, line 66 – col. 15, lines 5).

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide the data communication network using different frequency channels in the in the device of Lemelson in view of the teaching of Tymes so that interference on any particular frequency may be avoid by merely changing to a different frequency, but the transceivers will tends to stay on a single frequency for prolonged periods of time when there is no need to change (col. 15, lines 2-5 of Tymes).



In reference to claims 6 and 18, Lemelson does not disclose the first and second wireless transceivers part communicate via spread spectrum modulation.

Tymes discloses the data communication network in Fig. 1 communicate via spread spectrum modulation as claimed.

It would have been obvious for one of ordinary skill in the art at the time of the invention to modify the communication links using the spread spectrum modulation technique in the system of Lemelson in view of the teaching of Tymes because it would provide a reliable, low cost communication system (col. 3, lines 50-59).

In reference to claim 11, Tymes discloses the information is transmitted in burst to update the display part during said burst (data packet 17 and 18 of Fig. 2: col.5, lines 47-62).

In reference to claim 19, refer to the rejection as applied to claim 12.

In reference to claim 20, Lemelson disclose the keyboard 76 in Fig. 6.

12. Claims 10, 13-14, 17, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson (U.S Patent No 4,885,400) in view of Taaffe et al (U.S Patent No 5, 064,027), hereinafter Taaffe.

In reference to claim 10, Lemelson does not disclose the video generation element produces information indicative of an image to be display on the display part, but send only new picture information representing change in contents of the image.

Taaffe discloses a method an apparatus for processing and displaying images which send only new picture information (image) representing change in the contents of the image (col. 10, lines 37-43, col. 11, lines 28-41).

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide the method of sending only image that need to be changed on only one partition of the display in the system of Lemelson in view of the teaching of Taaffe because it would minimize data transfer time between the first processing and second processing unit (col. 2, lines 27-32).

In reference to claim 13, Lemelson discloses a system comprise a data entry part (keyboard 76); a display part (42) allowing transmission of data enter by data entry part to a remote processing terminal (second video phone), and receive video information from the remote processing terminal (see rejection as applied to claim 2 and col. 14, lines 68). In addition Taaffe discloses the method of only new image information representing changes in image since previous transmission as rejected in claim 10 above.

In reference to claim 14, refer to the rejection as applied to claim 12.

In reference to claims 15-16, refer to the rejection as applied to claim 1 (video information includes video synchronization information, i.e.: vertical synchronization and horizontal synchronization).

In reference to claim 17, refer to the rejection as applied to claim 4.

In reference to claim 19, Lemelson discloses the wireless transceiver produce a signal for said second wireless transceiver indicating of information enter on the data entry part (col. 14, line 55 – col. 15 line 17).

In reference to claim 21, Taaffe discloses the video information include digital data in a serialized form (the serial connection of optical 21, image controller 37 and working buffer 37 through image processing bus 39; col. 8, lines 58-63).

13. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lemelson in view of Pfeiffer et al (U.S Patent No 5,129,060).

In reference to claims 9, Lemelson does not discloses the video generation element produces a digital signal with parallel bit and converts said signal into serial signal which is transmitted by the second wireless transceiver part to the first housing.

Pfeiffer discloses a high-speed image processing system having video processor 106 converting a digital signal with parallel bits and converts the signal into serial signal and transmitted data serial signal to the display device.

It would have been obvious for one of ordinary skill in the art at the time of the invention to provide the processor 106 to convert the parallel bit to serial signal in the device of Lemelson as taught by Pfeiffer because it would provide high speed serial signal to enhance high speed image processing capabilities (col. 2, lines 35-37).

#### ***Response to Arguments***

14. Applicant's arguments with respect to claims 2-21 have been considered but are moot in view of the new ground(s) of rejection.

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***Conclusion***


15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DUC Q DINH whose telephone number is (571) 272-7686. The examiner can normally be reached on Mon-Fri from 8:00.AM-4:00.PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edouard Patrick can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DUC Q DINH  
Examiner  
Art Unit 2674

DQD  
December 10, 2005

  
**PATRICK N. EDOUARD**  
**SUPERVISORY PATENT EXAMINER**